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KEY TO ABBREVIATIONS

A. abstract of meeting paper CR, case report CC, case conference E, editorial

H, history

L, letter O. opinion obit, obituary R review

S, symposium paper SM, Selected Methods SN, scientific note SR, special report

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- 1395 Predictive Value of Electrophoresis on Cellulose Acetate and Citrate Agar for Altered Chromatographic Glycosylated Hemoglobin Values Owing to Variant Hemoglobins
  - J. S. Krauss and M. H. Jonah
- 1396 Improved Immunofixation for Detection of Complement 3 Conversion I. Mestyán and K. Jobst
- 1397 Kinetic and Equilibrium Assays for Glucose on the Cobas Bio Centrifugal Analyzer, with Use of the Glucose Dehydrogenase Reaction Bruce Shull, Jack Bush, Rebecca DeGroot Irons, and Nora Cerins Overbey
- 1398 Interference of Valproic Acid in the Colorimetric Determination of Free Fatty Acids in Plasma

- ucca, and Agostino Baruzzi
- 1398 The Serum Urea Nitrogen/Creatinine **Ratio and Liver Disease** Amin A. Nanji and David Blank
- 1399 Recommended "Order of Draw" for Collecting Blood Specimens into Additive-**Containing Tubes** Roger R. Calam and Marsha H. Cooper
- Effect of Macro Creatine Kinase BB on Results of Different Creatine Kinase Isoenzyme Methods Morris R. Pudek, Beryl E. Jacobson, Nadine Urguhart, and Simon W. Rabkin
- 1400 Timeliness of Books Willard R. Faulkner
- 1401 Importance of Evaporation Conditions and Two Internal Standards for Quantitation of **Amitriptyline and Nortriptyline** Patricia K. Sonsalla, Thomas A. Jennison, and Bryan S. Finkle
- 1402 Effect of Contraceptive Steroids on Creatine Kinase Activity in Serum Usha Gupta and Ramesh Chandra Gupta
- 1403 Dopamine \(\beta\)-Hydroxylase Activity in **Human Cerebrospinal Fluid from Various** Age Groups Keisuke Fujita, Kazuhiro Marata, Ryoji Teradaira, Hidehiro Beppu, Mamoru Ikegame, Kaoru Kawai, and Toshiharu Nagatsu
- 1404 Immunofixation: Application to the Identification of "Difficult" Monoclonal Compo-Enzo Pascali, Antonio Pezzoli, and Ales-

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- 1405 Fluorescein Effect on Magnesium and **Total Protein Determinations** Brian W. Renoe, John Sanborn, and David A. Herold
- 1406 Gaseous Contaminants in Sterilized **Evacuated Blood-Collection Tubes** Wesley E. Jensen, Robert T. O'Donnell, Irwin H. Rosenberg, David A. Karlin, and R. D. Jones
- 1406 Bilirubin Binding in Preterm Infants M. Perlman
- 1407 Albumin by Bromcresol Green-A Case of Laboratory Conservatism Jennifer Duggan and P. Finbarr Duggan
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- Henning von Schenck and Karl Rebel 1409 Is Quantiation of Serum IgD Clinically Useful? Adrian O. Vladutiu and Dymphna Netto
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# 1432 BOOK REVIEWS

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# 1436 THE CLINICAL CHEMIST J. Stanton King

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1439 REVIEW: Creatine Kinase, an Enzyme of Many Hermann Lang and Uwe Würzburg

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- 1448 Flameless Atomic Absorption Spectrophotometry of Selenium in Whole Blood Richard T. Tulley and H. Peter Lehmann
- 1451 Direct Determination of Lipoprotein Cholesterol Distribution with Micro-Scale Affinity Chromatography Columns Craig L. Bentzen, Kenneth J. Acuff, Bilkis Mare-
- chal, Murray A. Rosenthal, and Murray E. Volk 1457 Simple, Reliable Chromatographic Measurement of Oxalate in Urine
- Antonio Di Corcia, Roberto Samperi, Giuliana Vinci, and Giuseppe D'Ascenzo 1461 Enzymic Assay of Creatinine in Serum and
- Urine with Creatinine Iminohydrolase and Glutamate Dehydrogenase Enzo Tanganelli, Lorenzo Prencipe, Daniele Bassi, Stefano Cambiaghi, and Enzo Murador
- 1465 Liquid-Chromatographic Measurement of Flactin H. Patrick Covault, Tina Lubrano, Albert A. Dietz, and Herbert M. Rubinstein
- Simultaneous Enzyme Immunoassay of Two **Thyroid Hormones** Christopher Blake, Mohammad N. Al-Bassam, Barry J. Gould, Vincent Marks, James W. Bridges, and Clifford Riley
- Plasma Hormone Concentrations and Serum 17 $\beta$ -Hydroxysteroid Dehydrogenase Activity in Molar Pregnancy Catherine Massart, Catherine Le Pogamp, and Marc Nicol
- 1478 Liquid-Chromatographic Measurement of Nitrazepam in Plasma Helen Kelly, Anthony Huggett, and Sheila Dawling
- 1482 Verapamil and Calcium-Stimulated Enzyme Efflux from Skeletal Muscle R. Anand and A. E. H. Emery
- 1485 Hydrolysis by Human α-Amylase of p-Nitrophenyloligosaccharides Containing Four to Seven Glucose Units Harold David

- 1490 Refrigerating the Beckman "Airfuge" for Improved Steroid Receptor Assays Robert F. Vogt, Jr., and Deborah L. Feindt
- 1492 Gas-Chromatographic Analysis for Benzene in
- Andrea M. Jirka and Sidney Bourne Results by Fluorescent Immunoassay for Phenytoin Compared with Those by Enzyme Immunoassay, Liquid Chromatography, and Discrete Analysis (Dupont aca) G. Gonzalez, A. Cid-Amador, B. Steele, and A.
- Castro 1497 Two-Cycle Liquid-Chromatographic Quantitation of Cortisol in Urine
- Jiro Nakamura and Minoru Yakata 1500 Urinary Urea: Are Currently Available Methods Adequate for Revival of an Almost Abandoned Test? John Eckfeldt, Allen S. Levine, Charles Greiner, and Marcia Kershaw
- 1502 Kinetic Determination of Fibrinogen with a Centrifugal Analyzer E. Denegri and L. Prencipe

- 1505 Improved Liquid-Chromatographic Assay of Quinidine and its Metabolites in Biological Fluids
  - Ashok Rakhit, Michael Kunitani, Nicholas H. G. Holford, and Sidney Riegelman
- 1509 Radioimmunoassay for Phencyclidine (PCP) in Serum S. Michael Owens, James Woodworth, and Mi-

chael Mayersohn

- 1514 Unpredictable Fluctuations in Transcutaneous ρ<sub>CO2</sub> from Capillary Blood Gas Determinations Gerald J. Kost, John L. Chow, and Margaret Kenny
- 1517 Heparin Interferes with the Radioenzymatic and Homogeneous Enzyme Immunoassays for Aminoglycosides
  - Donald J. Krogstad, George G. Granich, Patrick R. Murray, Michael A. Pfaller, and Roland Valdes
- 1521 Single-Stage Automated Assay for Heparin Gordon F. Kapke, Ronald D. Feld, David L. Witte, and George F. Johnson
- 1525 Determinations of Amylase Isoenzymes in Serum by Use of a Selective Inhibitor William Y. Huang and Norbert W. Tietz

# SPECIAL REPORT

1528 Method-Comparison Studies on Immunoglobulins Sheshadri Narayanan

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- 1533 Symposia Lecturers and Abstracts
- 1549 Abstracts of Meeting Papers
- 1675 Scientific Workshops
- 1683 Commercial Workshops
- 1685 Roundtables
- 1688 New Products Review
- 1693 National Meeting Brochure

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- 1703 The Apparent Suppression of Na/K Data Obtained with Ion-Selective Electrodes is Due to Junction Potential and Activity Coefficient Effects, Not Bicarbonate Binding
  - John D. Czaban, Alan D. Cormier, and Kenneth D. Legg (Reply)
  - Robert L. Coleman and C. C. Young
- 1706 Potential Usefulness of Serum Prealbumin in Total Parenteral Nutrition Pierre Douville, Jean Talbot, Roch Lapointe, and Luc Belanger
- 1707 Automated Nephelometry of Total Protein in Cerebrospinal Fluid C. J. M. Sindic and C. L. Cambiaso
- 1708 Determination of Vanadium in Tissues and Serum
  - Rita Cornelis and J. Versieck (Reply)
- Steven D. Stroop 1709 Correct for Hydroxyproline in Elastin When Measuring Collagen in Tissues with a High Elastin Content
- Albert A. Dietz, Tina Lubrano, H. Patrick Covault, and Herbert M. Rubinstein 1709 An Equilibrium Free Thyroxin Immunoassay
- W. Hertl and W. P. Vann

  1710 Determination of Urinary Sodium and Potassium by Ion-Selective Electrodes and Flame Photometry Compared

  B. G. Burr

- 1711 Decreased Serum Alkaline Phosphatase Activity in Hypothyroidism: Possible Relationship to Low Serum Zinc and Magnesium Amin A. Nanji
- 1712 The Test-Assessment Chart
  Herbert Keller and Urs Gessner
  (Reply)
  E. Ärthur Robertson and André C. Van Steir-

teahem

- 1713 Anomalous Acid Phosphatase Activity in an 80-Year-Old Woman F. K. Gorus, I. Liebaers, L. Van Waesberghe, and A. C. Van Steirteghem
- 1714 Precautions Necessary When Assaying Aluminum in Serum of Chronic Hemodialyzed Patients Olivier Guillard, Alain Piriou, Patrick Mura, and Daniel Reiss
- 1715 An Enzymic Method for Urine and Serum α-Amylase Assay
  Fumiko Mashige, Akiyuki Ohkubo, Sachiko
- Kamei, and Manabu Yamanaka 1716 Unexplained Fluctuation in High-Density Lipoprotein Cholesterol Measurements in Serum of Some Persons Atsushi Murai, Tadao Miyahara, and Masakuni
- Kameyama 1717 Fluorescent Acidic Substances with Electrophoretic Migration Similar to CK-BB Timothy T. Dick and Kenneth E. Blick
- 1718 Heparin Interference in Creatine Kinase Assays Georgiann Andrejat, Lillian Fitzgibbon, Rasma Gilis, John Rodgers, and Basil T. Doumas
- 1719 Problems with Nonspecific Binding in Radioimmunoassay for Fibrinogen Fragment D Ruth D. Thornton, Padmakar Kulkarni, and James F. Wilson
- 1720 Effects of Hydrogen Peroxide on Chemical Determinations in Urine
  Brian W. Renoe, Jane Erwine, and Robert
- Thompson
  1721 Double Gammopathies: Importance of the Laboratory in Early Diagnosis
- V. T. Innanen, F. Recknagel, and G. Kutas 1722 Urinalysis: Minimizing Microscopy Lois Benham and Richard T. O'Kell
- 1722 Prediction of the Change in Extracellular Sodium Concentration in Hyperglycemia Complicated by Severe Losses of Water and Solute Antonios H. Tzamaloukas
- 1724 Reliability of Urinalysis for Glucose Ramesh Chandra Gupta, Alka Goyal, and Prem Prakash Singh
- 1724 γ-Glutamyltransferase Activity in Human Milk Kumud P. Patil and Neelima R. Rangnekar
- 1725 Rapid Single-Step Membrane Protein Assay Charles S. Greenberg and Philip R. Craddock
- 1726 Free Drug Concentrations Are Constant in Serial Fractions of Plasma Ultrafiltrate Randy L. Judd and Amadeo J. Pesce
- 1727 Use of Syringes Containing Dry (Lyophilized) Heparin in Sampling Blood for pH Measurement and Blood-Gas Analysis Gonzalo Madiedo, Rich Sciacca, Larry Hause,

and Edward Sasse

- 1729 Clinical Significance of Serum Acid Phosphatase as Measured by ELISA after Treatment of Benign Prostatic Hyperplasia
  E. Cooper, N. B. Pidcock, R. Glashan, P. H. Smith, M. R. G. Robinson, B. Richards, and D.
- Newling
  1730 Cyanide is Not Needed in the Cresolphthalein
  Complexone Determination of Serum Calcium
  Robert E. Earl and Ronald D. Feld
- 1730 Ferrozine Assay of Serum Iron and Total Iron-Binding Capacity Adapted to the COBAS BIO Centrifugal Analyzer David C. Schlosnagle, Polly S. Hutton, and Rex B. Conn

1732 Chlorhexidine Gluconate as a Urine Preservative in Analysis for Oxalic Acid John H. Peters, Harold W. Nolen, III, and G. Ross Gordon

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#### AUGUST

- 1735 A Multi-Stage Gaussian Transformation Algorithm for Clinical Laboratory Data James C. Boyd and David A. Lacher
- 1742 A Simple, Fully Enzymic Bloluminescent Assay for Triglycerides in Serum I. Björkhem, Kerstin Sandelin, and Anders Thore
- 1745 Use of Alumina, Sephadex G10, and Ion-Exchange Columns to Purify Samples for Determination of Epinephrine, Norepinephrine, Dopamine, Homovanillic Acid, and 5-Hydroxyln-doleacetic Acid in Urine
  Ben H. C. Westerink, Fokko J. Bosker, and James F. O'Hanlon
- 1749 Hornologous Radioimmunoassay for Human Parathyrin (Residues 53-84) W. Hitzler, H. Schmidt-Gayk, P. Spiropoulos, F. Raue, and M. Hüfner
- 1754 Fetal Lung Maturity in Complicated Pregnancy, as Predicted from Microviscosity of Amniotic Fluid Nicolas V. Simon, William A. Hohman, Robert C. Elser, John S. Levisky, Mason J. Carp, and Susanne S. Ashton
- 1758 Free Amino Acid Content of Lymphocytes and Granulocytes Compared Kiyotaka Fukuda, Yuko Hirai, Hisanobu Yoshida, Terumi Nakajima, and Tomofusa Usui
- 1762 Urinary Enzyme Excretion by Renal-Transplant Recipients in Relation to Interval after Transplantation

Klaus Jung, Jesus Diego, Dietmar Scholz, Karsten Schröder, and Volker Strobelt

- 1765 Enzymic and Chemical-Extraction Determinations of Free Fatty Acids in Serum Compared P. N. M. Demacker, A. G. M. Hijmans, and A. P. Jansen
- 1769 Micromethod for Liquid-Chromatographic Determination of Cholesterol in Lipemic Sera Lawrence E. Webb, Ernest Lengle, Rodger Izzo, and Eugene Woods
- 1772 Liquid-Chromatographic Determination of Pentobarbital in Plasma with Use of a Resin Coliumn and an Alkaline Mobile Phase Ram N. Gupta, Paul T. Smith, and Francis Eng.
- 1775 Evaluation of Three Minicolumn Procedures for Measuring Hemoglobin A<sub>1</sub> Glenn T. Hammons, Kurt Junger, Jay M. McDonald, and Jack H. Ladenson
- 1778 Liquid-Chromatographic Measurement of Cyanocobalamin in Plasma, a Potential Tool for Estimating Glomerular Filtration Rate Werner Butte, Hans-Hermann Riemann, and Alexander J. Walle
- 1781 "Rocket" Immunoelectrophoresis Assay of Vitamin D Binding Protein (Gc Globulin) in Human Serum Peter G. Waish and John G. Haddad
- 1784 Improved Direct Determination of Alpha- and Gamma-Tocopherols in Plasma and Platelets by Liquid Chromatography, with Fluorescence Detection Joanna Lehmann and Hilda I. Martin

- 1787 p-Nitrophenylglycosides as Substrates for Measurement of Amylase in Serum and Urine Ralph McCroskey, Tina Chang, Harold David, and Emily Winn
- 1791 Hydrolysis of Maltotetraose by Human Pancreatic cx-Amylase, with Liquid-Chromatographic Determination of the Products P. Laléoerie, M. L. Pourci, and M. Bailly
- 1794 Functional Activity of Intrinsic Factor Measured by Using Solubilized Receptor Protein George Marcoullis and Sheldon P. Rothenberg

## 1796 CORRECTIONS

# PROPOSED SELECTED METHOD

1797 Immunofixation Electrophoresis and Electrofocusing A. Myron Johnson

#### CASE REPORTS

- 1801 Methylmalonic Acidemia with the Unusual Complication of Severe Hyperglycemia Roger L. Boeckx and Jocelyn M. Hicks
- 1804 Calcium Oxalate-Phosphate Gallstones, A Unique Chemical Type of Gallstone Paul Wolf, Frank Mannino, Alan F. Hofmann, Brian Nickoloff, and David K. Edwards
- 1806 Idiopathic Hemochromatosis: Serum Ferritin Concentrations during Therapy by Phlebotomy Philip J. Garry and John H. Saiki

#### LETTERS

- 1809 Immunoglobulin-Bound Creatine Kinase BB in Serum with Electrophoretic Migration between MM and MB Isoenzymes Timothy T. Dick and Kenneth E. Blick
- 1810 Amniotic Fluid Squalene and Gestational Age Gianni Messeri, Daniela Billi, Piero Curiel, and Giorgio Mello
- 1811 Creatine Kinase Isoenzymes in Tissue from the Thyroid and from Follicular Adenomas of the Thyroid Franciso Pérez-Jiménez, Antonio Grilo, Juan Jimenez-Alonso, and José A. Jiménez-Pere-
- Jimenez-Alonso, and José A. Jiménez-Perepérez

  1812 Commercially Prepared Bilirubin Standards
- May Not Be Valid for Use with Direct Spectrophotometric Assay
  J. S. Amenta and J. A. Silverman
- 1812 Furosemide and Increased Serum Alkaline Phosphatase (Hepatic Isoenzyme) Mahantayya V. Math
- 1813 Further Examination of Clinical Chemical Indexes to the Severity of Coronary Artery Disease Ugo Lippi, Piero Cappelletti, and Daniela Sig-
- 1814 Influence of pH on the Activity of Enzymes in Urine at 37 °C Klaus Jung, Monika Pergande, Karsten Schröder.

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- Klaus Jung, Monika Pergande, Karsten Schröder, and Gottfried Schreiber 1815 Dialyzable Calcium Measured in 60 µL of Rou-
- tinely Processed Serum by Continuous-Flow Analysis with CO<sub>2</sub>/Air Segmentation John Toffaletti and Julia Hemker 1816 Routine Biochemical Tests in the Terminal
- 1816 Routine Blochemical Tests in the Terminal Stages of Chronic Alcoholic Liver Disease Amin A. Nanji and David Blank
- 1817 Comments on the Proposed Selected Method for Parathyrin Arnold W. Lindall, David V. Cohn, and H. Schmidt-Gayk (Reply)
  - F. P. Di Bella and C. D. Hawker
- 1818 Blood Gas Proficiency-Testing Materials: A Multilaboratory Comparison of an Aqueous Solution and a Fluorocarbon-Containing Emulsion

- James E. Hansen, Jack L. Clausen, John G. Mohler, Antonious VanKessel, and John Sever-inghaus
- 1820 Effect of Duration and Temperature of Storage on Nephelometry of Five Proteins Norman P. Kubasik, Teri Hunter, Margaret Ricotta, and H. E. Sine
- 1820 Fluorometry of Urinary Histidine Hiroyoshi Moriyama and Ronald S. Watanabe
- 1821 Sample Interaction (Carryover) on the aca when Glycol-Stabilized Serum Is Used Melvin R. Glick, Candace Breitkreuz Enockson, Donna K. Taylor, and Jan L. Trent (Reply) William L. Collinsworth
- 1821 A Simple Quantitative Rubella RIA Joseph D. Musto, John M. Pizzolante, and Vincent P. Chesarone
- 1822 Source of Error In β-Chorlogonadotropin Determinations
   T. Higgins
- 1822 A Lower Reference Interval for Hemoglobin
  A1
  Herbert K. Y. Lau, Susan F. Howard, Geraldine
  Tomczak, and Thomas K. Tan
  (Reply)
  Eric Petersen
- 1823 Phosphate Ion and Combined Phosphorus In Urlne Munehiko Mizobuchi, Hisako Ohmae, Fumiaki Umoto, Takeshi Tanaka, Kunitoshi Ichimura, Eiji Ueda, and Tatsumitsu Itano
- 1824 Unexpected Creatine Kinase Isoenzyme Patterns: Isoenzyme Electrophoresis May Yield Ambiguous Results Wolfgang Stein and Jürgen Bohner (Reply) Thomas E. Goffman
- 1825 Calibration of Alpha-Fetoprotein Assays
  P. G. Douglas and K. C. Tovey
  (Reply)
  Jean-Claude Forest, Francine Verreault, and
  Marcel Pouliot
- 1826 NAD<sup>+</sup>-Dissociable Macromolecular Lactate Dehydrogenase O. Peters, F. Gorus, and B. Van Camp
- 1826 Free Thyroxin: A Comparison of Direct and Indirect Methods and Their Diagnostic Usefulness In Nonthyroidal Illness Denis C. Lehotay, Carl W. Wight, Howard J.
- Seltman, Ajit T. Sanghvi, and Gerald S. Levey 1829 Sufficiency of One Control: A Survey of Three Small Chemistry Analyzers
- Hubert J. Van Peenen and Linda K. Bickerstaff 1829 More on Lactate Dehydrogenase in Myocardial Infarction David E. Bruns and John Savory
- 1830 Temperature Conversion Factors for Total and Isoenzyme 1 Activities of Lactate Dehydrogenase
- Rudolf A. Lutz

  831 Modified Inorganic Phosphorus Reagent for Use
  with Centrifugal Analyzer
  Nancy Parker and John F. Chapman
- 1831 Experiences and Opinions on CEA Assay Gabor L. Tolinay, Tjien O. Oei, Gerrie Mardis, and Laura Heistand (Reply) R. H. Christenson, Bobby Miles, and J. E. Ham-
- 1832 Automating Assay of Methotrexate Lynda L. Hunter and Harold J. Grady

#### 1834 BOOK REVIEWS

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Samuel Natelson, Morton F. Mason, Gail Stetten, Charles L. Winek, M. B. Epstein, J. S. King, J. A. Jonckheere, A. P. De Leenheer, Christopher S. Frings, and N. L. Anderson

# 1839 THE CLINICAL CHEMIST

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#### SEPTEMBER

# Fourteenth Annual Symposium on Advanced Analytical Concepts for the Clinical Laboratory

#### **1843 INTRODUCTION**

Carl A. Burtis, Charles D. Scott, Gerhard Ertingshausen, Arthur Karmen, Robert S. Melville, and Thomas O. Tiffany

# I. Analytical Concepts

- 1844 Release Tags: A New Class of Analytical Reagents Regula Joppich-Kuhn, Markus Joppich, and Roger W. Glese
- 1848 Enzyme Immunoassay with Flow-Amperometric Detection of NADH H. Mitchell Eggers, H. Brian Halsall, and William R. Heineman
- 1852 A Short-Term In Vitro Drug-Screening Assay for Cancer Chemotherapy
- Suio-Ling Chen, Jimmy R. Snoga, and H. Croft 1857 Solid-Phase Colorimetric Determination of Potassium Steven C. Charlton, Roger L. Fleming, and Adam
- Zipp
  1862 Enzyme Immunoassay of the Glycoprotein
  Tropic Hormones—Choriogonadotropin, Lutropin, Thyrotropin—with Solid-Phase Monoclonal
  Antibody for the α-Subunit and Enzyme-Coupled Monoclonal Antibody Specific for the
  - **β-Subunit**H. Garrett Wada, Robert J. Danisch, Sarah R. Baxter, M. Marcia Federici, Robin C. Fraser, Linn J. Brownmiller, and John C. Lankford
- 1867 An Innovative Technology for "Random-Access" Sampling John Smith, Dario Svenjak, John Turrell, and Dan Vlastelica
- 1873 Analysis of Serum by High-Field Proton Nuclear Magnetic Resonance
  Jay L. Bock

## II. Analytical Systems

- 1878 Potential Clinical Applications of Photoacoustics
  Allan Rosencwaig
- 1882 On-Line Direct Liquid Introduction Interface for Micro-Liquid Chromatography/Mass Spectrometry: Application to Drug Analysis Christine Eckers, Dale S. Skrabalak, and Jack Henion
- 1887 Semiautomated Microfluorometric Instrument and Reagent System for Monitoring Disease-Related Immunosuppression
- David F. Ranney and Alfred J. Quattrone

  1894 Radial Partition Immunoassay
  Joseph L. Giegel, Mary M. Brotherton, Peter
  Cronin, Michael D'Aquino, Susan Evans, Z. Herbert Heller, William S. Knight, Kanna Krishnan,
  and Mark Sheiman
- 1899 Development of the Biostator® Glucose Clamping Algorithm
- A. H. Člemens, D. L. Hough, and P. A. D'Orazio 1905 Rapid Enumeration of T Lymphocytes by a Flow-Cytometric Immunofluorescence Method Stephen H. Ip, Charles W. Rittershaus, Kathleen W. Healey, Carol C. Struzziero, Robert A. Hoffman, and Peter W. Hansen

- 1910 Automated Intelligent Microscopy (AIM) And Its Potential Application in the Clinical Laboratory F. H. Deindoerfer, W. B. Boris, J. R. Gangwer, C. W. Laird, and J. W. Tittsler
- 1917 A Computer-Based Maintenance Reminder and Record-Keeping System for Clinical Laboratories

Bruce I. Roberts, Carl L. Mathews, Charlotte J. Walton, and George Frazier

# III. Electrochemical Techniques

- 1922 Organic Electrochemical Techniques Having Potential Clinical Application R. A. Durst, E. A. Blubaugh, K. A. Bunding, M. L. Fultz, W. A. MacCrehan, and W. T. Yap
- 1931 Relationship between Direct Potentiometric and Flame Photometric Measurement of Sodium in Blood Fred S. Apple, David D. Koch, Steven Graves,

and Jack H. Ladenson

- 1936 Establishing the Direct-Potentiometric "Normal" Range for Na/K: Residual Liquid Junction Potential and Activity Coefficient Effects John D. Czaban, Alan D. Cormier, and Kenneth D. Legg
- 1946 Analytical Problems Facing the Development of Electrochemical Transducers for In Vivo Drug Monitoring: An Overview Thomas C. Pinkerton and Bonnie L. Lawson
- 1956 Development of a Multichannel Electrochemical Centrifugal Analyzer Hee Kyoung Cho, Yong Han Lee, Richard A. Couch, J. M. Jagadeesh, and Carter L. Olson
- 1962 An Electrochemical Assay System for Peroxidase and Peroxidase-Coupled Reactions Based on a Fluoride Ion-Selective Electrode lobal W. Siddigi
- 1968 Electrochemical Investigation of Hapten-Antibody Interactions by Differential Pulse Polarography Kenneth R. Wehmeyer, H. Brian Halsall, and Wil-
- liam R. Heineman

  1973

  Polymer-Membrane Electrode-Based Potentiometric Sensing of Ammonia and Carbon Dioxide in Physiological Fluids

  M. E. Meyerhoff, Y. M. Fraticelli, J. A. Green-

berg, J. Rosen, S. J. Parks, and W. N. Opdycke

#### **LETTERS**

Gochman

- 1979 Serum Creatine Kinase and Corticolsteroids Ramesh Chandra Gupta, Alka Goyal, and Prem Prakash Singh
- 1979 Potential Interference with the Technicon SMAC Triglyceride Measurement, as Illustrated by Metronidazole Sally N. Davies, John B. Campbell, and Nathan

1980 Atypical Serum Creatine Kinase MM and Myeloma during Dermatomyositis M. Chevrot, S. Herson, A. Piton, P. Godeau, and

- J. Galli
  1981 Cefoxitin Interference with Serum Creatinine
  Measurement Varies with the Assay System
  M. Gray Kirby, Peter Gal, H. Wallace Baird, and
  Brenda Roberts
- 1981 Interference with the YSI Glucose Analyzer: A
  Comment from the Manufacturer
  Henry E. Sostman
- 1982 Estimating Biological Variation in Diagnostic Tests
  Douglas Dix, Patricia Cohen, and Samad Barzegar
- 1982 Interference of "intralipid" with Measurement of Total Serum Proteins in the Du Pont aca is Removed by Trichlorofluoromethane

- Jan Borgen, Ole Christian Ingebretsen, and Kare Sønstabø
- 1983 Quantification of Short-Chain Fatty Acids in Plasma
- Brian McArthur and Ashok P. Sarnaik

  1984 Production of Lactate by Aerobic Bacteria
  Frederick L. Kiechle, Robert W. Starnes, and
  James M. Colville
- 1986 Quantitative Electrodialytic Separation of lons from Whole Blood before Analysis James A. Cox and Ronald H. Carlson
- 1987 Interference in the Proposed Selected Method for Determination of Theophylline by Liquid Chromatography Jan H. G. Jonkman, Rokus A. de Zeeuw, and

Roelof Schoenmaker

(Reply) Larry A. Broussard <sup>1</sup>

- 1988 Gamma-Glutamyltransterase in Saliva Juán Jiménez-Alonso, Laura Jaimez, Francisco Pérez-Jiménez. Antonio Grilo, and José A. Jiménez-Perepérez
- 1989 Discrepant Results for Free Thyroxin by Radioimmunoassay and Dialysis Procedures Explained

R. Mardell and T. R. Gamlen

- 1989 Performance Studies with Reagent Concentrates for SMAC Rajiva Nandan, William Delavari, Paul Breider, C. A. Mudd, and J. B. McCormick
- 1991 Further Evidence for the Importance of Inter-Sample Air Compression as a Source of Error in a Continuous-Flow (Technicon smac) System M. H. Abernethy, T. A. Walmsley, and R. T. Fowler (Reply)

E. Arthur Robertson and Ruth A. Chesler

- 1992 Enzymatic Assays for Urea Nitrogen and Uric Acid on the Cobas Bio Centrifugal Analyzer Bruce C. Shull and Nora Cerins-Overbey
- 1993 Removal of Labile Glycosylated Hemoglobin to Correct for Fluctuations in Hemoglobin A<sub>1</sub> Measurement by Column Chromatography Steven G. Wyble, Carol A. French, and Theodor K. Mayer
- 1994 Mannitol Interferes with the Du Pont aca Method for Inorganic Phosphorus Paul W. Landesman, John A. Lott, and Richard A. Zager
- 1995 Cathodal Creatine Kinara Band, a Poor Prognostic Sign in Malignancy Mary Ann Grobbel, Noel S. Lawson, and Roger
- R. Calam 1996 Lability of Lactate Dehydrogenase Activity in Ethylene Glycol-Treated Pooled Serum, and the Stabilizing Effect of Glycerol
- Kiyoh Tanishima and Mikio Nagahara 1997 Concentration of Ammonium Hydroxide is Critical in Chromatographic Solvents for Amniotic Fluid Phospholipids
- John H. Glick, Jr. and Carolyn L. Crocker

  1998 False Increases of β-Subunit Chorlogonadotropin In Commercial Kit Results Because of 
  Cross Reactivity with Lutropin 
  Catherine Ketchum, Noel Maclaren, Jim Jensen, 
  lan Phillips, Roy Weiner, and Mike Kappy
- 1999 Serum Catalase Enzyme Activity in Acute Pantrealfils Lászió Góth, István Mészáros, and Hajnalka Námeth
- 2000 Citrate Agar Electrophoresis is Electrochromatography

J. S. Krauss and M. H. Jonah

Do Some Commonly Measured Serum Enzyme
Activities Correlate with the Extent of Metastatic Tumor Involvement of the Liver?

Amin A. Nanji and Nazma Jetha

2002 Cupric Acetate-Phosphoric Acid Staining Inadequately Reflects the Lecithin/Sphingomyelin Ralió

Hans Egberts (Reply)

- A. A. Pappas, R. H. Gadsden, and R. E. Mullins
   Uthium Interference with Potentiometric Sodium Determination
  - G. A. Harff and C. van Leeuwen

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